ROOST ENTERPRISE OVERVIEW

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# Environments as a Service

## Instant and Ephemeral Pre-Production Environments & Pull Request

While in the cloud-native world a lot of infrastructure has been slowly abstracted and automated, but pre-production environments are still created using hand-crafted scripts. To make matters worse, every team like development, QA, DevOps, and security have their own bespoke environments and pipelines to determine whether a pull request is ready for production or not. These environments increase the risk that applications that work in pre-production won't work in production.

Roost solves this problem by bringing the **As-a-Service** model to pre-production environments with **"Environments as a Service."**

## Roost Solves Massive Challenges Caused by Static and Bespoke Environments

| PROBLEMS | | ... SOLVED WITH ROOST |
|---|---|---|
| ✗ **Unmaintainable Environments** | **Inconsistency** between environments due to configuration drag<br>**Changes are slow and labor intensive** because of reliance on custom scripting | ✓ Automated environment creation immutable and consistent |
| ✗ **High Change Failure Rate** | **Unpredictable behavior in production** due to inconsistency between environments<br>**Inability to reproduce issue**s between environments makes debugging during an incident slower | ✓ Eliminate change failures by certifying change at every pull request, feature branch |
| ✗ **Wasted Resources** | Organizations pay for 24/7 access, but most environments are idle **outside of normal business hours**.<br>**Skilled engineers** spend time maintaining and configuring environments instead of working on high-value problems. | ✓ Instant and ephemeral environments save time and money |

# Increase the Speed of Innovation

With Roost Environments, teams no longer need to worry about creating and maintaining pre-production environments. Developers can focus on writing code and infrastructure is handled transparently. Roost auto-discovers environment configuration and optimizes it using the power of machine learning. Developers can effortlessly spin up an ephemeral environment either at pull request, feature branch or any custom insertion point. Once created, Roost Environment can be shared with other stakeholders like Quality Assurance, Product Managers, Security in the form of a simple URL. Each stakeholder can validate this tangible deliverable using their own criteria.

## Developers Accelerate the Feedback Loop Across Stakeholders

### Quality Assurance

QA tests functional aspects to discover regressions earlier.

### Product Team

Product managers certify pull requests and provide feedback asynchronously.

### Sales

Sales creates demo environment to share latest features with prospects.

### Instant & Ephemeral Production-Like Environments

Create an instant and ephemeral environment at every pull request, feature branch, tag or a custom insertion point in the DevOps/GitOps pipeline.

### Automatic Testing & Certification of Applications

Roost uses machine learning for automatic and continuous code change validation.

### Share Environments with Stakeholders

Environments are available as a custom URL to be sent to different stakeholders like QA, product manager, security, sales engineering team (in slack or equivalent channel) so that they can validate the tangible deliverable.

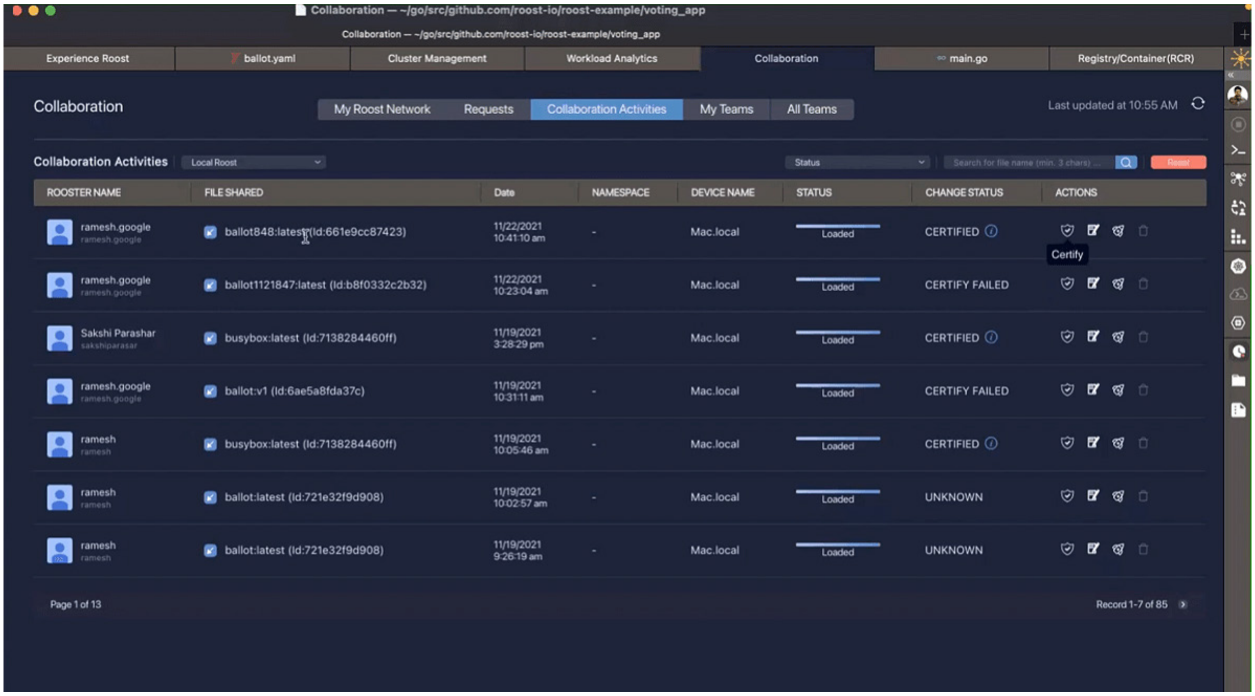
### Convention Over Configuration

Roost follows the “convention over configuration” principle and ships with all best practices as policies. For example Roost has built in policies that “do not allow containers to run as root.”*

**According to “Sysdig 2022 Cloud-Native Security and Usage” report 76% of containers in production were found running as root (or privileged).*

### Significantly Reduce Cloud XOps Costs

Avoid running environments 24/7 instead spin them up and down on demand.  Create an environment only when needed and gracefully destroy when a release is complete.



Collaboration

Last updated at 10:55 AM

Collaboration Activities

| ROOSTER NAME | FILE SHARED | Date | NAMESPACE | DEVICE NAME | STATUS | CHANGE STATUS | ACTIONS |
|---|---|---|---|---|---|---|---|
| ramesh.google<br>ramesh.google | ballot848:latest (Id:661e9cc87423) | 11/22/2021<br>10:41:10 am | - | Mac.local | Loaded | CERTIFIED | |
| ramesh.google<br>ramesh.google | ballot1121847:latest (Id:b8f0332c2b32) | 11/22/2021<br>10:23:04 am | - | Mac.local | Loaded | CERTIFY FAILED | |
| Sakshi Parashar<br>sakshiparasar | busybox:latest (Id:7138284460ff) | 11/19/2021<br>3:28:29 pm | - | Mac.local | Loaded | CERTIFIED | |
| ramesh.google<br>ramesh.google | ballot:v1 (Id:6ae5a8fda37c) | 11/19/2021<br>10:31:11 am | - | Mac.local | Loaded | CERTIFY FAILED | |
| ramesh<br>ramesh | busybox:latest (Id:7138284460ff) | 11/19/2021<br>10:05:46 am | - | Mac.local | Loaded | CERTIFIED | |
| ramesh<br>ramesh | ballot:latest (Id:721e32f9d908) | 11/19/2021<br>10:02:57 am | - | Mac.local | Loaded | UNKNOWN | |
| ramesh<br>ramesh | ballot:latest (Id:721e32f9d908) | 11/19/2021<br>9:26:19 am | - | Mac.local | Loaded | UNKNOWN | |

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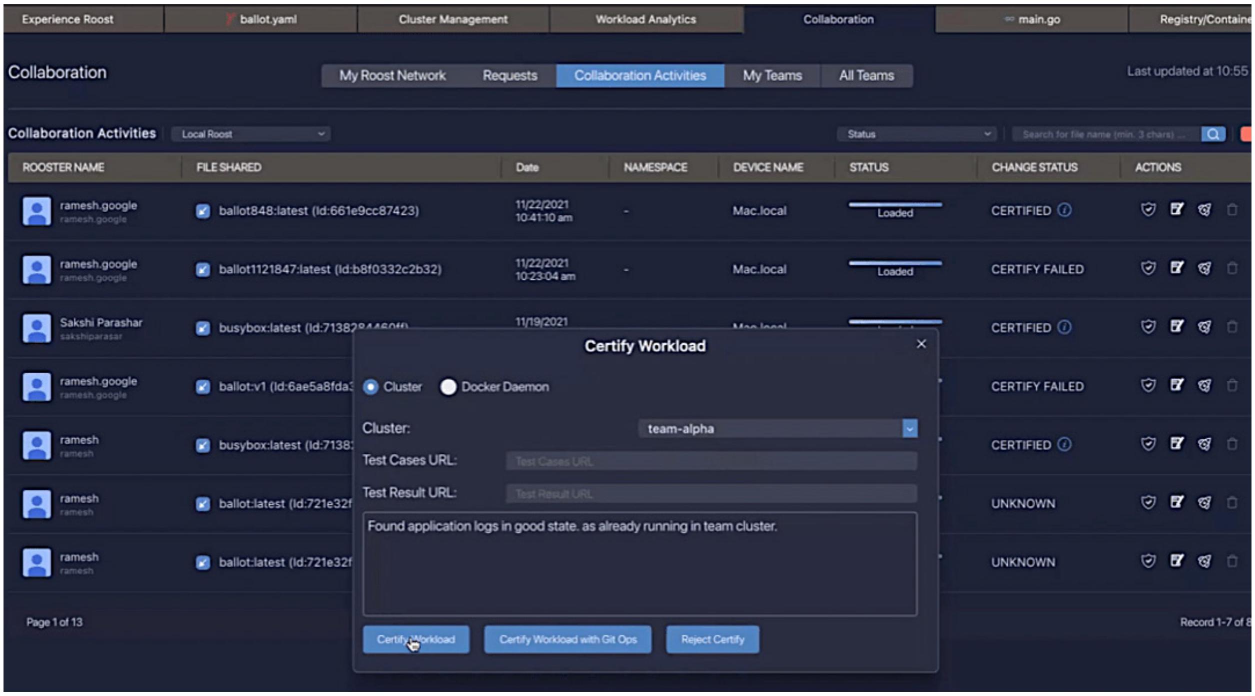
**Figure 1. Instantly Create Ephemeral Production-like Environments**



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| Sakshi Parashar<br>sakshiparasar | busybox:latest (Id:713828446Off) | 11/19/2021 | | Mac.local | | CERTIFIED | |
| ramesh.google<br>ramesh.google | ballot:v1 (Id:6ae5a8fda3 | | | | | CERTIFY FAILED | |
| ramesh<br>ramesh | busybox:latest (Id:7138 | | | | | CERTIFIED | |
| ramesh<br>ramesh | ballot:latest (Id:721e32f | | | | | UNKNOWN | |
| ramesh<br>ramesh | ballot:latest (Id:721e32f | | | | | UNKNOWN | |

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Certify Workload

● Cluster ○ Docker Daemon

Cluster: team-alpha

Test Cases URL: Test Cases URL

Test Result URL: Test Result URL

Found application logs in good state. as already running in team cluster.

**Figure 2. Automatic Testing and Certification of Containers**

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Roost provides instant pre-production environments as a service, that automatically certify applications accelerating time to market and reducing downtime.

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